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The River Runs
News from the Cowpasture River Preservation Association

Vol. 52, Issue No. 1
Winter 2023

The swinging bridge at Griffith Knob. Photo by Angie Hinebaugh.

Please send us your best photos of the Cowpasture River and the wildlife that accompanies it so that we might include them in our newsletter, as well as on our Facebook and Instagram pages.
It’s the holiday season as I write this letter. More specifically, that hectic period of time between Thanksgiving and Christmas. Writing allows me a welcome opportunity to sit still for a moment. I am truly grateful for this!

Just before Thanksgiving, I received a text from a friend. She wanted me to know how grateful she was for our friendship. What a wonderful message to receive and one which set in motion my thoughts on the meaning and expression of gratitude.

It seems the older one becomes, the better one understands the importance of gratitude. In other words, this subject is most likely pondered by older folks. Many of us have learned not to take too much for granted!

I, of course, am grateful for all of my relationships with family, friends and pets and really, for the life I lead. At the risk of sounding a tad sappy, I am also quite grateful for the CRPA and the many members who so generously support its mission. The Cowpasture River positively impacts my life in many special ways. I hope this is also true for many of you.

Well, it seems my quiet time is up. I have a list of Christmas preparations to work my way through. I think I’ll start by taking a stroll down the hill and across the river to hang some wreaths at the entrance to Windy Cove Farm!

My best wishes for a wonderful holiday season and for good health and happiness in the New Year!

From Elizabeth and Witcher Dudley, and their two dogs, Rodeo and Drover
As we come to the end of our 50th anniversary year, I look back with much gratitude. Thanks to your generosity, we have had another successful annual campaign. Our 2021-2022 campaign wrapped up on October 31, 2022. The final details of that campaign can be found on page 15 of this newsletter. Many of you have already donated during our new campaign which kicked off on November 1st, and we thank you. We are so grateful for your support.

This year’s annual CRPA online auction was a big success! The auction began on September 1st and wrapped up on September 18th. A total of $3,285.00 was raised through the event, all of which goes into the Bill Hardbarger Educational Scholarship Fund. Many thanks to all of you who participated, both the donors and the bidders.

You may have noticed that we have featured some recent updates about the James Spinymussel in some of our prior newsletters. On that note, we hope to offer a Zoom presentation in the coming year with Joe Wood, a senior scientist at the Chesapeake Bay Foundation who works closely with freshwater mussels. If you are interested in learning more about mussels and Joe’s work, please check out the article on page 12 of this newsletter. You may also view a presentation that Joe recently gave to the Chesapeake Bay Commission at https://www.chesbay.us/library/public/documents/Meeting-Info/September-2022/Meeting-Materials/7-Joe-Wood-Freshwater-Mussels-Sep-2022.pdf.

And speaking of the Chesapeake Bay Foundation, we are excited about the possibility of partnering with them to offer canoe trips on the Cowpasture and/or Jackson Rivers for students in our area. So stay tuned for further information!

I look forward to the New Year with all of you at CRPA. It is such a privilege to work with you.

— Lynne Griffith
The Walton Tract Clean-Up

Many thanks to Doug Albrecht, Dick Brooks, Puggy Farmer, Marc Koslen, Bucky Wells, Mike and Peggy Van Yahres, and Joe and Kathy Wood for helping us to pick up trash at the bi-annual Walton Tract Clean-Up held on October 22, 2022. You can check out the haul of trash that we took away in the photos below. Many thanks to all of them for coming out to help keep the Walton Tract and the Cowpasture River clean. (Photos by Lynne Griffith)

Please Take Note of our New Email Address

We are in the process of transitioning over to a new email address. For years, our email has been directorcrpa@gmail.com, but we are now switching over to director@cowpastureriver.org.

We will still be checking our old email address for at least the next year, but we’d ask that you begin switching over to our new one. We will be making this change on all of our printed materials moving forward. Thank you.
September came, and so did the annual Dabney Lancaster Community College (now, Mountain Gateway Community College) CRPA annual river lab. Twenty-two forestry students attended, along with the Forestry Program Head, Scott Reigel. The students are enrolled in Forest Ecology, and protecting water quality is a large part of modern forestry education.

Mike and Marla Whiteside again hosted the class at their river home, and Dave Peters, Mike Whiteside and I conducted the lab. Kathy Farmer took pictures, and the CRPA paid for the pizza lunch.

The lab begins with a quick overview of the historical importance of the rivers in Virginia and the watersheds into river development. Then the students are given clear liquid vials which are filled with different chemical solutions. One vial does contain clean water, but without opening the vials, they are to decide which one is potable. The lesson being, looking clear is not reliable.

Next the lecture moves to benthic invertebrates and their identification and importance to monitors in determining if the river is clean. Common macroinvertebrate identification sheets and the Virginia Save Our Streams scoring sheets are handed out. Then the proper method of collecting the specimens using a net is demonstrated, and from there, the students enter the river to collect the “bugs.” The final task is delivering the specimens to the counting tables, identifying the specimens and scoring the river. The lab averages about three and a half hours.

I hope the membership appreciates the importance of hosting this lab to the forestry students and the resulting recognition of the CRPA as an expert source for student river quality information. My thanks to Mike, Dave, and Kathy for the volunteer time, and to Kim Manion (CRPA Education Chair) and the Board of Directors for seeing the value of this lab and, of course, paying for the pizza.

My best to all,

Puggy
Education Committee Update (continued)

Mountain Gateway Community College Scholarship

We are happy to announce that on October 28, 2022, our Board President, Elizabeth Dudley, signed a contract with Mountain Gate Community College to provide a yearly $500 “Bill Hardbarger Educational Scholarship.” The scholarship is available to a second year forestry student who resides in the state of Virginia. The student must maintain a cumulative GPA of 2.5 or above; otherwise, the scholarship will be withdrawn. The scholarship is granted for one year (two consecutive semesters) and applies to tuitions and books. Funds for the scholarship come from the Bill Hardbarger Educational Scholarship Fund, most of which is funded through our yearly online auction. The Hardbarger family believes strongly in the mission of the Community College and the role it plays within our community. They have benefitted from Mountain Gateway Community College over the years (formerly known as Dabney Lancaster Community College), and they are thrilled to support this scholarship in Bill’s memory.
Jewelry Designer and Weaver Inspired by the Cowpasture River

by Nan Mahone Wellborn

Jewelry designer Sarah Muse and weaver Meridith Entingh were among the 28 artists participating in the May 2022 CRPA Artist Retreat at Fort Lewis Lodge and Farm. Like the other artists, they came seeking inspiration and the opportunity to enjoy the camaraderie of like-minded creators. The participating artists eager for painting, photography and sketching gravitated to the river to take in the sounds, textures and colors, and to the farmland for sweeping vistas. But how would the Cowpasture River and surrounding pastures inspire a jeweler and a weaver?

Muse and Entingh both have studios in Roanoke, and this was their first visit to the upper Cowpasture River Valley and Fort Lewis. Both are successful, professional artists with a large following.

Entingh is known for her unique color combinations and weaving patterns using special hand died yarns and threads. She came prepared to weave scarves on-site, looking for inspiration in the colors of spring with a portable loom that she initially set up under the Pavilion.

Muse has a multifaceted creative background in varying media and today focuses on her passion for goldsmithing and designing meaningful fine bespoke jewelry. Upon arrival at Fort Lewis, she noted, “My plan is to relax, take a breather from my daily routine and be grounded in the beauty of the Cowpasture River.” She took off to sketch and explore and was captivated by the river’s spring colors at the swimming hole under the cliffs.

Muse discovered the deck platform by the river that was big enough to hold Entingh’s loom and knew she would enjoy the bird activity and view of the river. Since good

Meridith Entigh initial loom set up under the Pavilion at Fort Lewis.

Sarah Muse sketching at the swimming hole by the Cowpasture River.
weather was in the forecast, Entingh moved her loom to weave by the river. Her portable loom has traveled to many places, but never outdoors in an environment such as this.

Those of us familiar with the sounds of the flowing Cowpasture know it can make your heart burst with ideas. And so it did!

Entingh used the colors of the river and surrounding cliffs to develop the scheme for the weft that would make for several scarves. Elated by her first time weaving outdoors, she shared, “This first experience of weaving by the Cowpasture River has inspired me to seek out other situations and to find a new loom that is more portable than the first.” In the future, we’ll see more of her work rooted in outdoor experiences.

Muse’s studies of the river and the architecture of Fort Lewis’ buildings led to a creative lightning bolt! She envisioned the Silo’s dome inverted, to become a basin to hold a special gemstone. A ring was in the making.
The Silo Ring concept developed further with step cut baguette diamonds to mimic the windows and a look of being clad in standing seam metal roofing and shingles, all in 18K Palladium White Gold. Sarah was keen to find a gemstone that represented the varying green colors of the fast-moving river. She found the perfect sparkly stone, a spectacular hand cut 4.40 carat hexagonal Congolese Tourmaline.

![Silo Ring against its inspiration - the silo at Fort Lewis Lodge.](image1)

![Sarah Muse’s Silo Ring inspired by the spring flow of the Cowpasture River.](image2)

The CRPA Artist Retreat provides time for reflection that often results in a creative outpouring. Entingh, Muse and the other artists left the three-day experience with new work in progress that reflected the unique aspects of the Cowpasture River Valley. The 3rd CRPA Artist Retreat at Fort Lewis Lodge and Farm is open to all who seek a creative getaway. Stay tuned for more details about the spring Artist Retreat to be announced in January.

To see more of Entingh’s and Muse’s work visit the links below:

**Meridith Entingh:**
Website: [www.meridithweaves.com](http://www.meridithweaves.com)
Email: meridithweaves@gmail.com

**Sarah EK Muse:**
Email: sarah@sarahmuse.com

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**Correction to the 2023 CRPA Calendar**

The beautiful July photo in our 2023 calendar of the turtles enjoying the sun on the Cowpasture River was actually taken by Emma Tinsley, not by Tom Watts. Our apologies for the error.
Josh Dolin’s goal of achieving the master angler benchmark, by catching a trophy-sized fish in all 30 Virginia game fish species, brought him three hours from his Richmond home to the Cowpasture River. On May 6, he wasn’t targeting the river’s trout or smallmouth bass. Instead, he was after his 23rd trophy species, the fallfish. Not only did Dolin land a trophy-sized fallfish, he tied the International Game Fish Association’s all-tackle world record for the species.

A fallfish is the largest native minnow species in eastern North America. They’re aggressive, opportunistic feeders that eat everything from aquatic insects to baitfish. Virginia began recognizing the fallfish as a trophy fish in 2020 to bring more attention to the underrated and hard-fighting game fish.

After his long drive, Dolin hiked into his fallfish spot. “I hiked a mile and a half into the spot I was going to fish,” he says. He was planning on fishing with nightcrawlers, but when he arrived at his spot, he had a rod rigged with a Nungesser spoon and decided to fish it for a little while.

“I made one cast and nothing,” Dolin says. “I was retrieving it with a twitch and a pause. On my second cast I paused and the fish ate it as the spoon fluttered. It fought like a fish three times its size, and I thought I had a monster brown trout on. I got it to shore after it took me into some trees and fought it for a couple of minutes. The state record was 3 pounds 5 ounces, I put it on my certified spring scale, and it immediately went to 3.5 pounds, so I knew I had a potential state record.”

As Dolin took a few photos of his record catch, a heavy rainstorm blew in, and he started the hike back to the truck. For his fish to qualify as a state record he would have to weigh it on a certified

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As Dolin took a few photos of his record catch, a heavy rainstorm blew in, and he started the hike back to the truck. For his fish to qualify as a state record he would have to weigh it on a certified
scale with a Virginia DRW representative present. Then, the fish species must be confirmed by a biologist. Before all that could take place, Dolin needed to get back to Richmond.

On the drive back through the Blue Ridge Mountains, he got a flat tire. “I’m in a no-cell service area in the middle of a storm,” he said. To make matters worse, his tires and rims were brand new, and he didn’t have his wheel lock in the truck. The one glimmer of luck — beyond catching a record fish in two casts — was that he had intermittent service. He reached a friend who knew the area, and passed the info along to Dolin’s brother and girlfriend. After four hours, help arrived, and he was back on the road to get his state record certified.

The official weight was 3 pounds 9.5 ounces, making it the new Virginia state record fallfish. The current IGFA all-tackle world record fallfish is 3 pounds 9 ounces, which was caught in 2009 in the Susquehanna River. “To beat a world record, it has to be 2 ounces over the existing world record, so it will tie the existing world record,” Dolin said. “It leaves me some room because I only made two casts, and I know there’s a bigger one in there.”

About the Author:
Scott Einsmann is Outdoor Life’s gear editor. He oversees the gear team’s editors and writers who are subject matter experts in bows, knives, hunting, fishing, backpacking and more. He lives in Richmond, Virginia with his wife and two bird dogs.
The Cumberland monkeyface, Pistol-grip and Rayed bean may be some of the most unsung heroes of Virginia’s waterways.

All three are types of freshwater mussels, one of the planet’s most unique and underappreciated creatures. But these species have also been vanishing from waterways in alarming numbers for decades. In Virginia, more freshwater mussels than any other species are listed as endangered by the U.S. Fish and Wildlife Service.

Scientists and other mussel advocates aren’t giving up hope, however. And thanks to new state funding, freshwater mussels could see their numbers grow stronger in the years to come.

This year, the General Assembly approved $400,000 to fund a statewide freshwater mussel restoration plan – a first in Virginia’s history. The Virginia Department of Wildlife Resources will receive the funds over the next two years to hire two additional staff members and plan strategies to restore dwindling populations.

Strategies can look like this summer’s release of the endangered James spinymussel into the main stem of the James River, where it hasn’t been seen for more than 50 years. Scientists worked for over 20 years to propagate, raise and release almost 1,300 mussels in an attempt to reestablish a native population in the river.

“That’s not something that happens every day that you’re able to reintroduce a species like that,” said Joe Wood, a senior scientist with the Chesapeake Bay Foundation who works closely with freshwater mussels. “It sort of speaks to the promise of what we can do. We have a concerted effort and that’s really without a ton of dedicated resources.”

New technologies and techniques for mussel propagation are helping efforts to restore even more species, said Brian Watson, Virginia’s chief malacologist, or mollusk scientist. There are currently three freshwater hatcheries in Virginia dedicated to restoring the organisms across the state.
One of those hatcheries, DWR’s Aquatic Wildlife Conservation Center located near Marion, has successfully produced 39 species of freshwater mussels, including 19 federally endangered and six state-listed species. The center has released over 150,000 juvenile mussels in the past 16 years into Virginia portions of the Clinch, Powell and Holston rivers.

The funding for the restoration plan is thanks in part to the surplus in this year’s state budget, said Sen. Creigh Deeds, D-Bath, who requested the funding in the budget. It’s a relatively small amount, but advocates say it’s a significant victory for freshwater mussels.

“The whole idea is just to get the Department of Wildlife Resources to have some people to work on the restoration, do some research and figure out how we can make sure these very vital organisms don’t go extinct,” Deeds said.

Decline of the “Livers of the Rivers”

Scientists estimate that 70% of the mussel fauna in the U.S. are in peril, while only 30% of Virginia’s 82 species are considered stable. The remainder are in decline, according to DWR.

Mussels, often called the “livers of the rivers,” are essential for maintaining clean waterways throughout the state and preserving a balanced ecosystem. A single one can filter up to 15 gallons of water per day, preventing nutrients and other harmful pollutants from flowing downstream, according to a report released last year by a Chesapeake Bay Program committee.

The report also estimates that 90% of the freshwater mussel population in the Chesapeake Bay has been lost due to a number of human and environmental factors.

Dams can disconnect fish from mussel populations that rely on them to carry their larvae. And while freshwater mussels are adept at filtering out pollutants, even they cannot survive in the most contaminated waters. Runoff from agriculture or developed lands can infiltrate waterways and prove fatal for the organism.

“Everything depends on clean water,” Deeds said. “From humans and other mammals, to reptiles, amphibians and vegetation.”

Challenges to Restoration

Understanding how freshwater mussels reproduce is central to understanding why restoring populations is so challenging, Wood said. Unlike other animals that can actively search for a mate, mussels rely on fish to carry their fertilized eggs. It’s a very complex process that biologists are still learning to re-create outside of the mussels’ natural environment.

“Twenty to 30 years ago we weren’t even able to simulate that process,” Wood said. “Making baby mussels was not on the table in relatively recent history.”

But it can be difficult to determine what host fish each freshwater mussel species needs for propagation or what its historical range used to look like.
The $400,000 in the budget is more than enough to create the restoration plan, said Watson. The concern is what happens after the funding runs out and it’s time to implement it.

“That’s always the issue with doing conservation with any type of species, is usually we’re always short on resources,” Watson said. “In Virginia we have about 80 species of freshwater mussels and we’re just not going to be able to work with all of them.”

The department has to prioritize what mussels it will put its efforts into, which could lead to more rare species getting less attention.

“They may be so rare that just biologically it’s difficult to restore them,” Watson said. “You put a lot of work into them kind of at the expense of other species that you might be able to work with and actually achieve some positive results.”

That was the case with the green-blossom pearly mussel, which was officially declared extinct in Virginia last fall.

Pollution Solutions

Wood said the restoration plan will be helpful whether or not additional resources are given after the funding runs out. That’s because it will allow partner agencies and organizations to work with DWR to come up with solutions that may not necessarily involve more expensive restoration methods.

Planting natural forest buffers alongside waterways, for example, can help reduce sediment and other pollutants that would otherwise run off into mussel habitats and threaten species’ longevity. Working with private landowners to do conservation projects like fencing out livestock from waterways helps improve water quality as well.

“Every bit of the natural ecosystem is important to our existence if we are to exist as a civilized people,” Deeds said. “We need to recognize that the things that are natural that exist in nature all have a purpose, and if we are to have a balance in our lives, in our environment, in our communities, we need to make sure that all those natural organisms are able to exist and to maintain the equilibrium.”

About the Author: Mercury intern Meghan McIntyre is a senior at Virginia Commonwealth University studying digital journalism. She has stories covering Virginia government and politics published in various outlets across the state through Capital News Service, a course in the Richard T. Robertson School of Media and Culture at VCU. She was also a previous news intern at VPM and briefly freelanced for The Farmville Herald and The Suffolk News-Herald. She can be reached at mmcintyre@virginiamercury.com.
Thank You To Our Loyal Watershed Members

We are grateful for the additional donations we have received for the 2021-2022 Annual Campaign season. These donations have come in since the Fall 2022 newsletter was published. The members listed below either recently joined, renewed their memberships or were accidentally left off of the donor list published in the last newsletter.

**Total donations for the 2021-2022 Annual Campaign ending on October 31, 2022 came to $71,786.09.**

Our new 2022—2023 annual campaign kicked off on November 1, 2022, and it will run through October 31, 2023. Those donors will be listed in the Fall 2023 newsletter. Thank you for your generosity!

**BEDROCK PATRON**
- Tuck and Chris Carter

**WALLAWHATOOLA SOCIETY**
- David Kirk

**WATERSHED STEWARD**
- Tom and Anna Lawson
- Alice Murray
- Bill and Barbara Tavenner

**HEADWATERS CIRCLE**
- Jim and Trisha English
- Allan and Rebecca Howerton
- Paul and Valerie Marini
- Steve and Kelly Van Lear
- Jacob H. Wamsley, II

**RIVER GUARDIAN**
- Allen S. Tolbert
- Rhet Wilson and John Deehan

**INDIVIDUAL**
- Jeffrey McDanald

**IN MEMORY OF:**
- Don Sutton
  *by Wayne Cross*
- James and Elsie Slough
  *by James Slough, Jr.*

Give the Gift of a CRPA Membership

It is the holiday season. Think about a gift membership for someone you love who has experienced the Cowpasture during his/her lifetime. It can be a young person who may have been a camper or someone you’d like to introduce to the watershed, or even someone you’d like to be envious of such a treasure.

All are welcome and what a great gift! See the last page of this newsletter for details on how to give. Or go online to [https://cowpastureriver.org/shop/donate/](https://cowpastureriver.org/shop/donate/)
Protect The Things You Love

Please join us today. The river needs your time, talent and support!

Your donations are tax deductible!

☑ $25 Adult Membership (minimum annual dues per individual
☑ $50 Streamside Level Donation
☑ $100 River Guardian Donation
☑ $250 Headwaters Circle Donation
☑ $500 Watershed Steward Donation
☑ $1,000 Wallawhatoola Society Donation
☑ $1,500 + Bedrock Patron Donation
☑ $3,000+ Endowment Contributor Donation
☑ Memorial Donation $_________________________
   in memory of ________________________________
☑ $12 Junior Membership Dues
☑ I am a NEW member! ☐ I am RENEWING
☑ This is a gift membership for ____________________

NAME(S): ________________________________________________________
ADDRESS: _________________________________________________________
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E-MAIL: ___________________________________________________________

☑ I prefer to NOT have my name published as a contributor.
☑ Please send my newsletter by email version only.
☑ I am interested in becoming a volunteer and/or river monitoring.

(Note: A financial statement is available upon written request from the Virginia Department of Agriculture and Consumer Services — Office of Charitable and Regulatory Programs.)